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THE WATERWAYS OF THE PACIFIC NORTHWEST

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HENRY MORSE STEPHENS

THE WATERWAYS OF THE PACIFIC NORTHWEST

Clarence B. Bagley

Recently, as I have studied this subject its magnitude has grown more apparent. The space allotted my paper will permit little more than a historical sketch. It has been my life work to gather together the written and printed history of the Pacific Northwest, but I am not a professional writer of it.

For my purpose this caption refers to the Columbia River and its tributaries, and Puget Sound and the rivers emptying into it, including the Fraser, and their watersheds. The Columbia and Fraser are the only rivers that break through the great mountain ranges which parallel the shore of Washington and Oregon. With the Pacific Ocean only a few miles away, with its intricate network of great and lesser rivers, and its inland tidal waters whose aggregate littoral exceeds the distance between Cape Cod and Cape Flattery, it is remarkable how much of the exploration and industrial and commercial development of the Pacific Northwest has come from the East towards the West.

Alexander Mackenzie in 1793, when he discovered the upper reaches of the Great River; Lewis and Clark in 1805; Simon Fraser and John Stuart in 1805–6; Daniel W. Harmon in 1810; David Thompson in 1811, and a little later Wilson Price Hunt, and thereafter nearly all the leading men of the Northwest Company and the Hudson's Bay Company, braved the hardships and dangers of the trip over the Rocky Mountains and down the turbulent waters of the Columbia or the Fraser.

John McLoughlin, James Douglas and Peter Skene Ogden, Nathaniel J. Wyeth and the first missionaries, John C. Frémont, B. L. E. Bonneville, all led expeditions westward. Astoria was founded from the sea, and the expeditions of Astor's party to establish inland posts went up the river from the west, but they

were all failures. For nearly seventy years the canoe and the bateau, the ox team or the horse team attached to the prairie schooner, were the instruments whereby the pioneers searched out the country and peopled its valleys and plains.

During the period between 1842 and 1855, old Oregon was mostly peopled by immigrants from the Mississippi valley, who came overland. After the completion of the railroad across the Isthmus in 1855, immigrants from near the Atlantic seaboard took steamer at New York City for Aspinwall, crossed the Isthmus by rail, thence to San Francisco by steamer and to Oregon and Washington by sailing craft or steamer. Troubles with Indians between the Missouri and Columbia, of frequence in the later 'fifties, followed closely by the great Civil War period, materially checked the influx of population overland. In fact, not until the completion of the Northern Pacific in 1883, and soon afterward of the Oregon Shortline, did the real development of Oregon and Washington begin.

In 1850 there were in old Oregon only 13,000 white settlers, 1049 of whom lived north of the Columbia River; in 1860 Oregon had 52,000, Washington, 11,500; in 1870, Oregon 91,000, Washington 24,000; in 1880, Oregon 175,000, Washington 75,000; in 1890, Oregon 314,000, Washington 349,000. The Northern Pacific Railroad had been completed in 1883, quickly followed by the Oregon Shortline, and Washington had gained nearly fivefold in a decade and had passed her older sister in population. In 1900 Oregon had 414,000, Washington 518,000; in 1910 Oregon had 673,000, with Washington 1,142,000, or a gain by the latter of more than 100 per cent in ten years. Oregon had an assessed valuation of 905 millions and Washington, 1025 millions. Neither had a bonded debt.

The Canadian Pacific, Great Northern, Chicago, Milwaukee & St. Paul, Northern Pacific, Oregon Shortline and Southern Pacific railroads had all reached Pacific coast terminals, and in consequence the great Northwest had gained remarkably in population, wealth and volume of trade and commerce.

In the Willamette valley the water power afforded by the streams of the Cascades and Coast ranges served to operate the early wood working and flouring mills, the woolen mills and small

manufacturing plants, but on Puget Sound it was more economical to operate the saw-mills by steam where the ships could reach the docks easily and quickly.

Almost immediately after their arrival at Tumwater, the first American settlers began building a saw-mill and a grist-mill on the bank of the Des Chutes River. The irons were bought from the Hudson's Bay Company and the millstones were made from a large granite boulder near by. Both mills were run by water power. A few other small mills were constructed elsewhere on the Sound, but all were financial failures.

No large city has grown up in the Northwest on the site of the great water powers of the Columbia, Fraser, Willamette or smaller streams. Also, excepting Victoria and New Westminster, no large city has grown up on the site of the trading posts of the Hudson's Bay Company or the villages first started by the American settlers in the Willamette valley or on Puget Sound. Seattle, Portland, Spokane, Tacoma, and Vancouver in British Columbia, appeared on the map years after a dozen of their early rivals had been thriving little towns, and the most successful were founded by farmers from the Mississippi valley who, perhaps, had never seen a large city.

A regular transportation line was established on the Lower Columbia in 1843; and in 1845, deep sea vessels began to frequent the harbor of Victoria and the Columbia River. These included many war vessels of the United States and Great Britain. Steamship communication, more or less irregular, began between San Francisco and the Columbia River in 1850, and between the former city and Puget Sound about 1857, though the *Otter* and other steamers had made occasional trips on the latter route long before that time. Also, about 1850, steamers began to operate on the Lower Willamette and on the Columbia below the Cascades.

After Vancouver's day little is reported of the Puget Sound region for about thirty years. As early as 1827 the schooners *Vancouver* and *Cadboro*, owned and operated by the Hudson's Bay Company, are known to have sailed from the Columbia River to Puget Sound and engaged in traffic with the natives as far north as Sitka. In 1836 the Steamer *Beaver* arrived in the Columbia River from England, but in a short time she left the

Columbia and began running up and down the coast in and out of the rivers, bays, and inlets between Puget Sound and Alaska, carrying grain and other food stuffs northward and bringing back furs and skins and at times towing sailing vessels to and fro.

During all the early years, down the waters of the Willamette and Columbia came considerable wheat and other grains, but freight rates were so high that little profit was realized by the grower and the acreage in consequence increased but slowly. The lumber exports of the Columbia River region also were large. On Puget Sound, until metal supplanted wood in shipbuilding, numerous cargoes of ships' spars went to the Atlantic seaboard and to Europe, but sawed lumber and piles, with shingles and lath to complete the stowage, were the chief articles of export. Good coal was mined on Vancouver Island earlier than on the American side of Puget Sound, but no considerable shipments abroad began until after 1870. For more than thirty years thereafter the coal mining industry of the Puget Sound country ranked closely after the lumber business and a large fleet of seagoing vessels was constantly employed in the trade. During recent years the use of oil in competition with coal for fuel has curtailed greatly the output of the northern coal mines.

It is more than 1650 miles from the mouth of the Columbia to the uppermost point of navigation, but rapids and falls occur at frequent intervals. Until quite recently no continuous navigation of more than three hundred and fifty miles was practicable. Traffic between Portland and Lewiston, Idaho, required the operation of three separate steamers on as many stretches of the stream and still another on the upper Willamette. This made necessary artificial methods of getting freight and passengers around the breaks in the river, and it was not long before an absolute monopoly was held by one company on the Columbia and by another on the upper Willamette, though attempts at independent operation of boats on the latter were frequent. To-day, a steamer can run from Lewiston to Astoria, or, if of light enough draught, to Eugene on the Willamette.

In 1850 a wooden tramroad was built on the north side and later another on the south side around the cascades of the Columbia. Late in the 50's the Oregon Steam Navigation Com-

pany gained control of them and installed a steam railroad on the north side.

About 1860 that company began the construction of a railroad from The Dalles to Celilo, which commenced operations in 1862, during a period of intense mining activity in Idaho, Eastern Oregon and Northern Washington. Thereafter it practically owned the Columbia above the Cascades. The history of its operations and exactions and of the colossal fortunes it piled up for its stockholders reads like fiction.

The first actual improvement of a waterway that I remember was at Oregon City. In 1860, at the west side of the Willamette River, the local transportation company constructed basins above and below the falls, so that a long warehouse covered both landing places, making it a comparatively easy matter to transfer freight up and down, while passengers walked. About 1870, the company replaced this system by a short canal with locks.

For a great many years the United States has made liberal appropriations to be used in overcoming the difficulties of navigation of the Columbia River and its main tributaries. Under date of August 6, 1915, Major Arthur Williams, United States Engineer of the First Oregon district, furnished the following list of original expenditures:

Snake River, in Oregon, Washington and Idaho, including $85,000 appropriated by the state of Washington, $338,786.43; Columbia River and tributaries above Celilo Falls to the mouth of Snake River, Oregon and Washington, including $25,000 from the state of Washington, $494,600.84; Columbia River at The Dalles, Oregon and Washington (Dalles-Celilo Canal), $4,685,855.79; canal at the Cascades of the Columbia River, Oregon and Washington, $3,912,473.33; Columbia River between Vancouver, Washington, and the mouth of the Willamette River, $97,532.16; Oregon Slough (North Portland Harbor), Oregon, $34,437.60. In addition to the foregoing $390,921.58 have been expended in operation and maintenance.

In a letter of recent date from Chas. L. Potter, Lieutenant Colonel, Corps of United States Engineers, are tabulated the amounts heretofore expended in the second district on all river and harbor improvements to June 30, 1915, as follows:

Willamette River above Portland, and Yamhill River, Oregon, $857,671.92; operating and care of lock and dam in Yamhill River, Oregon, $43,426.95; Willamette River at Willamette Falls, Oregon, $83,441.71; operating and care of canal and locks in Willamette River, near Oregon City, Oregon, $344.22; Columbia and Lower Willamette rivers below Portland,Oregon,$3,577,958.35; mouth of Columbia River, Oregon and Washington,$13,156,162.52; Clatskanie River, Oregon, $18,867.34; Cowlitz River, Washington, $102.208.63; Lewis River, Washington, $39,587.19; Cowlitz and Lewis rivers, Washington, and Clatskanie River, Oregon, dredge and snagboat, $36,138.04; Grays River, Washington, $3,857.23.

Had this opening up to navigation been completed prior to the building of the railroads along the banks of the rivers and across the mountains, it would have been of inestimable benefit to the tributary country, but until its present population shall have increased ten fold, perhaps twenty fold, and the railroads shall be unable to handle the traffic; when the waterway craft shall be aids to the railroads, not competitors, I believe transportation of freight by steamboats or by barges with tugs will be impracticable. Steamboat service up the swift current with little cargo will fully offset any cheapening that may be possible down stream, so that most of the business will continue to be done by the railroads. However, the open river will undoubtedly be a check upon the railroads.

A few weeks ago, at Lewiston, during the rejoicings over the opening of the upper Columbia to free navigation, one of the leading speakers remarked that the party in steaming up the river had seen but one other boat and she was tied to the dock.

The state of Washington was in some measure benefited jointly with Oregon by the work in the Columbia basin noted above. The actual expenditures by the United States in Washington have been small in comparison. On Willapa Harbor they have been $241,878.39; at Gray's Harbor $3,231,906.78; on Puget Sound they have been, at Olympia, $197,701.35; at Tacoma, $324,784.10; at Everett and Snohomish, $664,752.59; at Bellingham, $149,834.69; Skagit River, $101,455.54; Swinomish, $217,652.29. In addition to the work done at Tacoma by the United States, the railroads and the municipality have spent

large sums in providing docks and other shipping facilities, and it is equipped to handle its full share of the Sound and seagoing traffic. The foregoing figures were furnished me from the office of the resident United States Engineer, Major J. B. Cavanaugh.

Portland is the overshadowing city of the Columbia basin, and has always handled most of its business, while on Puget Sound trade and commerce have been divided. It is all a vast harbor and its cities have had access almost equally to the sea. Seattle, Tacoma, Vancouver, Victoria, New Westminster, Everett, Bellingham, Anacortes, Olympia, and Port Townsend are credited with an aggregate of nearly three-quarters of a million of inhabitants.

During the last ten years there has been expended in Seattle more than fifteen millions of dollars in harbor improvements. By the operations of the Seattle & Lake Washington Waterway Co. there have been 1400 acres of land filled, much of it now covered with buildings of a most substantial character. When this company began operations these lands were covered twice a day from six to sixteen feet with tidal water. Through them it dug waterways forty and fifty feet deep at low tide two and one half miles long, 1000 feet wide, and two miles additional five hundred feet wide. This has required the construction of seven miles of bulkheads, all at a cost of a little more than five millions of dollars, all paid by the owners of the filled-in lands. Some four hundred additional acres of land, at times covered by the tides or by high waters of the Duwamish River, have been reclaimed.

A ship canal between the waters of Puget Sound and Lake Union and Washington is now nearing completion and is expected to be in use during the current year. It will admit the passage of ships drawing thirty feet of water, directly into the lakes.

The locks at the outer entrance have been constructed by the United States government. The larger is 850 feet long and is the second in size on the American continent, being exceeded in size by one of the locks of the Panama Canal. They cost $2,275,000. The state of Washington, county of King and city of Seattle contributed $1,250,000 to pay for condemnation of the necessary land and dredging and digging of the canals. Add to

this $6,000,000, raised by the sale of longtime bonds voted by the people and expended by the Port Commission of Seattle for docks and warehouses, refrigerator plants and other facilities for speedy and economical handling of cargoes of grain, fruit, fish, lumber, coal, etc., and the above aggregate of $15,000,000 has been passed.

John W. B. Blackman, Esq., City Engineer of New Westminster, B.C., has supplied information regarding Victoria, Vancouver, and New Westminster, British Columbia, as follows: Expenditures in Fraser River in opening, deepening, straightening, etc., $1,399,645.05; in Vancouver, mostly in widening the Narrows, $2,174,148.45; at Victoria in recent years, $750,000 in round numbers, has been spent in blasting and removing rock from the inner harbor, and a new break-water is now being constructed at an estimated cost of $3,000,000.

The canoe and bateau gave place to the steamboat, the steam cars took away from the steamboat much of its business, and in the last quarter century the city and interurban electric cars have taken over much of the short haul traffic, while to-day the motor car is dividing the passenger service and almost monopolizing the transportation of garden and dairy products into and about the cities. Who shall predict how soon some other method of transportation shall make the land and water traffic of to-day seem as archaic as the ox team compared with a high power racing car?

The streams of Oregon and Washington afford one-third of the available water power of the United States. A small part of this is now being used to develop electric energy, transmitted at long distances at high voltage, though not comparable with one line in California that is transmitting electricity at a voltage of 150,000 a distance of about 250 miles. The potential possibilities are so vast they can scarcely be estimated. In the North one of the transcontinental railroad lines is formulating plans to operate its trains electrically between the Rocky Mountains and Puget Sound. The first cost will be great, but when the new service begins its greater economy and comfort will undoubtedly compel all competing lines to follow the lead of their rival.

The Panama Canal has been in operation only a year and it is too soon even to predict its influence upon the ocean commerce of the North Pacific, but so far little of the lumber, fish, or other

commodities from the Northwest have gone through it eastward. Its influence has been almost negligible, and while considerable freight has gone from the Middle States eastward fifteen hundred miles to Atlantic ports and thence around by water, the railroads of the Pacific Northwest have not as yet seen cause to alter their tariffs because of it. Doubtless, when the great war in Europe is ended, and normal conditions are regained, the Pacific Northwest will enjoy in full measure the benefit of this great ocean waterway.

To-day passenger ships leave Puget Sound for Alaska ports on an average of every eighteen hours, and nearly as many freighters ply on the same route.

The ocean commerce of the North Pacific with eastern Siberia, Japan, China, the Indies, and the Philippines across the Pacific, and with San Francisco, Hawaiian Islands and through the Panama Canal has, in the last few years, reached enormous proportions. Already the resources of six great transcontinental railroad systems are taxed to the uttermost to handle their part of it.

On the floor of the United States Senate, January 24, 1843, in the course of debate upon "The Oregon Bill," participated in by Senators Archer, Benton, Calhoun, Choate, Linn, Morehead, McRoberts and Woodbury, Calhoun gave utterance to the following:

"But it may be asked, 'what then? Shall we abandon our claim to the territory?' I answer, no. I am utterly opposed to that; but, as bad as that would be, it would not be as much so as to adopt a rash and precipitate measure, which, after great sacrifices, would finally end in its loss. But I am opposed to both. My object is to preserve and not to lose the territory. I do not agree with my eloquent and able colleague that it is worthless. He has under-rated it, both as to soil and climate. It contains a vast deal of land, it is true, that is barren and worthless; but not a little that is highly productive. To that may be added its commercial advantages, which will, in time, prove to be great. We must not overlook the important events to which I have alluded as having recently occurred in the eastern portion of Asia. As great as they are, they are but the beginning of a

series of a similar character, which must follow at no distant day. What has taken place in China, will, in a few years, be followed in Japan, and all the eastern portions of that continent. Their ports, like the Chinese, will be opened; and the whole of that portion of Asia, containing nearly half of the population and wealth of the globe, will be thrown open to the commerce of the world and be placed within the pales of European and American intercourse and civilization. A vast market will be created, and a mighty impulse will be given to commerce. No small portion of the share that would fall to us with this populous and industrious portion of the globe is destined to pass through the ports of the Oregon Territory to the valley of the Mississippi, instead of taking the circuitous and long voyage around Cape Horn; or the still longer, around the Cape of Good Hope. It is mainly because I place this high estimate on its prospective value that I am so solicitous to preserve it, and so adverse to this bill, or any other precipitate measure which might terminate in its loss. If I thought less of its value, or if I regarded our title less clear, my opposition would be less decided."

The present witnesses the culmination of this remarkable prophecy made by one of America's ablest statesmen more than seventy years ago.

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